

REMARKS

The applicant has noted that, due to a clerical error, certain claims presented for examination in this application were also presented for examination in co-pending application serial number 09/852,049. Therefore, claims 8-13, 15, and 59 have been canceled in favor of continued prosecution in the co-pending application.

The comments of the applicant below are each preceded by related comments of the examiner (in small, bold type).

2. **Claims 14 and 58-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldhor (US Patent No. 5,231,670) in view of Porter (US Patent 4,829,576).**

3. **Regarding claim 14, Goldhor teaches a system and or method for generating text from a voice input that divides the processing of each speech event into a dictation event and a text event. The teachings of Goldhor provide for the system and method to process both simple spoken words as well as spoken commands and to provide the necessary text generation in response to the spoken words or to execute an appropriate function in response to a command. Speech recognition includes the ability to distinguish between dictation text and commands. (Figure 1, elements 12, 14, 16, 18, "recognizer"; col. 1, lines 17-20 55-68; col. 2, lines 1-2; col. 4, lines 10-13; col. 5, lines 40-55; col. 6, lines 46-48). Which reads on a voice user interface device comprising means for converting a voiced utterance into a corresponding signal as an input to a computer or into an internal command to the interface device and means for recognizing the voiced utterance as either one to be converted to said signal or as one to be converted to said command, since the system specifically receives the input speech and determines if the speech is for text or is a command and makes changes to new sets of utterances when creating new dictation events or new text events.**

Goldhor does not provide for converting a voiced utterance being configured to change the set of voiced utterances upon receipt of the internal command. Porter discloses a voice recognition system for providing speech recognition systems, which recognize commands for use with a text editor. The recognition system is used with command words for finding files, searching for text strings or selecting menu choices (Col. 7, line 33 to col. 8, line 31; col. 18, line 44 to col. 21, line 5; Figure 41; col. 21, line 39 to col. 22, line 34). Porter specifically teaches the system is designed so as to improve the ease and reliability with which humans can control computer systems which deal with elements contained in data structures, such as words in text files or names in a database (ccl. 2, lines 15-27). It would have been obvious to one of ordinary skill at the time of the invention to modify the system of Goldhor to implement changing a set of voiced utterances to be recognized based on an input command as taught by Porter, for the purpose of improving the ease and reliability of the recognizer, as also suggested by Porter.

Amended claim 14 requires that a "set of internal commands be[] determined by [a] converter during operation of the converter." By contrast, in both Goldhor and Porter, the commands that are available are static and cannot be changed. Therefore, neither Goldhor nor Porter, alone or in combination, anticipate amended claim 14 or would have rendered this claim obvious.

5. Regarding claim 58, Goldhor ...
Claim 58 has been canceled.

6. Claims 6-13, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldhor (US Patent No. 5,231,670) in view of Torres (US Patent No. 4,821,211).

7. Regarding claim 6, Goldhor teaches a voice user interface system for producing input to a computer, and a program for execution on said computer, a state of said program, said configuration being associated with control of said program, comprising a voice recognizer for recognizing a voiced utterance and for providing corresponding signals as input to said computer (Figure 1, elements 12, 14, 16, 18, "recognizer"; col. 1, lines 17-20 55-68; ccl. 2, lines 1-2; col. 4, lines 10-13; col. 6, lines 46-48), and a converter for converting said voiced utterance into a command string including a command directing motion of said pointer relative to said configuration (col. 1, lines 17-20 55-68; col. 2, lines 1-2; col. 4, lines 10-13; col. 6, lines 46-48).

Goldhor does not specifically teach mimicking mouse commands or various details related to the display of the graphical user interface. Torres teaches a method and apparatus for Navigating among program menus using a graphical menu tree and provides a description of well known cursor functionality and graphical user interface display for permitting computer users to access computer applications and manage windows by graphically designating graphic representations (which reads on "graphical elements") and manipulating those graphical representations ("graphical elements") via a graphic pointing device or voice interaction (Figures 1-3 and 4D; ccl. 3, line 64 to col. 5, line 56).

It would have been obvious to one of ordinary skill at the time of the invention to provide for the manipulation of the movement of the cursor via vocal interaction as taught by Torres, in the system of Goldhor, because this would enable a person who is not physically able to move the cursor to be able to move the cursor or access and control icons/applications via vocal commands.

Amended Claim 6 requires that the command position the pointer "at coordinates specified *relative to*" a graphical element of the configuration other than the pointer. The examiner acknowledges that Goldhor does not disclose a graphical user interface; therefore

Goldhor does not disclose this element. As explained below, Torres does not disclose this element either.

In Torres, a user must *manually* position the cursor on a particular element (menu) of the menu hierarchy. (col. 4, lines 27-28: the user must first "position the pointer to the graphic position associated with the desired menu"). A user cannot specify, for example, that the pointer be moved 5 pixels to the left of the menu (or, in the broad language of claim 6, "at coordinates specified relative to a graphical element of said configuration other than said point"). In contrast, the specification of the application discloses a command "move to local coordinates," (33:1-9) which are coordinates that are "specified relative to" a given window.

Because neither Torres nor Goldhor discloses positioning a pointer "at coordinates specified relative to a graphical element", neither reference, alone or in combination, anticipates amended claim 6, nor would the references have rendered the claim obvious.

Regarding claim 7, Goldhor teaches command string further comprises a command to said program at (col. 1, lines 17-20 55-68; col. 2, lines 1-2; col. 4, lines 10-13; col. 6, lines 46- 48).

Claim 7 is patentable for at least the same reasons as claim 6.

Regarding claim 8 ...

Regarding claim 9 ...

Regarding claim 10 ...

Regarding claim 11 ...

Regarding claim 12 ...

Regarding claim 13 ...

Regarding claim 15 ...

Claims 8 through 13 and 15 have been canceled.

8. Claims 35-40 and 52-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torres (US Patent No. 4,821,211).

9. Regarding claim 35, Torres teaches a method and apparatus for navigating among program menus using a graphical menu tree and provides a description of well known cursor functionality and graphical user interface display for permitting computer users to access computer applications and manage windows by graphically designating graphic representations and manipulating those graphical representations via a graphic pointing device or voice interaction (Figures 1-3 and 4D; col. 3, line 64 to col. 5, line 56), which reads on a method for use with a machine having a graphical user interface and an application program, the method comprising the graphical user interface being controlled at least in part by a control signal that can be invoked in response to the pointing device and the graphical user interface enabling a user to launch the application program and receiving a voice utterance from a user.

Torres does not specifically disclose launching the application program in response to the received voiced utterance without invoking the control signal. However, the teachings of Torres specifically disclose using voice interaction to control system functionality (col. 4, lines 16-17).

It would have been obvious to one of ordinary skill at the time of the invention to use the system of Torres to launch application programs via voice control and interaction so as to provide computer access to application programs for physically challenged individuals.

Torres explains that an application is launched by monitoring *mouse or pointing device* input in order to determine if a menu selection is made. At col. 5, lines 6-16, Torres explains that there is "a command bar at the top of the display screen with several actions which may be selected *using a mouse or other pointing device*. One of the actions which may be selected is the 'MENUTREE' function of the present invention." In col. 5, lines 13-15, Torres explains that the system "monitors the user input in decision block 10 [of FIG. 4A] to determine if the 'MENUTREE' function has been selected."

In other words, the system monitors the "mouse or other pointing device" to determine if the MENUTREE function has been selected. Ultimately (in FIG. 4D, block 66), an application is launched as a result of the user's mouse or pointing device activity.

The sole disclosure of voice control in Torres is at col. 4, lines 15-17, where Torres states, "The control is provided by either keyboard, mouse, touch screen, or voice interaction techniques." A person having ordinary skill in the art, based on this passage, would have understood that the "voice interaction techniques" alluded to by Torres refer to controlling a mouse or keyboard signal using voice commands.

Thus, Torres did not disclose, and would not have rendered obvious, launching an application program without invoking a control signal that can be invoked in response to a pointing device on a machine.

Regarding claim 36, Torres teaches an operating system with a graphical interface at (col. 4, lines 3-6).

Regarding claim 37, Torres teaches the graphical user interface is shown on a display at col. 3, line 67.

Regarding claim 38, Torres teaches the machine comprises a computer (col. 4, lines 1-7).

Regarding claim 39, similar limitations to claim 35 are discussed above. Additionally Torres teaches there are multiple application programs (Figures 1-3 and 4D; col. 3, line 64 to col. 5, line 56).

Regarding claim 40, similar limitations to claim 35 are discussed above. Additionally, Torres teaches there are multiple application programs, an operating system provides the graphical user interface, the graphical user interface is shown on a display, and the machine comprises a computer (Figures 1-3 and 4D; col. 3, line 64 to col. 5, line 56).

Claims 36-40 are patentable for at least the same reasons as claim 35.

Regarding claim 52, similar limitations to claims 35, 41 and/or 45 are discussed above. Additionally, Torres teaches selectable menu items (Figures 1-3 and 4D).

As discussed above in connection with claim 35, Torres does not disclose, and would not have rendered obvious, displaying a menu without invoking a control signal that may be sent by a pointing device.

Regarding claim 53, similar limitations to claim 35 are discussed above. Additionally Torres teaches there are multiple graphical representations (Figures 1-3 and 4D; col. 3, line 64 to col. 5, line 56),

Regarding claim 54, Torres teaches the graphical user interface is shown on a display at col. 3, line 67.

Regarding claim 55, Torres teaches the machine comprises a computer (col. 4, lines 1-7).

Regarding claim 56, Torres does not specifically disclose performing a function associated with a menu item in response to a second received voiced utterance. However, the teachings of Torres describe the well-known implementation of a

pointer for accessing computer applications and disclose using voice interaction to control system functionality.

It would have been obvious to one of ordinary skill at the time of the invention to use the system of Torres to provide application programs or other menu item functionality via second or additional received voiced utterances so as to provide computer access to application programs for physically challenged individuals.

Regarding claims 57, Torres teaches manipulating other graphical items includes altering size and location of a window (Figures 1-3 and 4D; col. 3, line 64 to ccl. 5, line 56).

Claims 53-57 are patentable for at least the same reasons as claim 52.

10. Claims 41-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Torres (US Patent No. 4,821,211) in view of Porter (US Patent No. 4,829,576).

11. Regarding claim 41, Torres teaches a method and apparatus for navigating among program menus using a graphical menu tree and provides a description of well known cursor functionality and graphical user interface display for permitting computer users to access computer applications and manage windows by graphically designating graphic representations and manipulating those graphical representations via a graphic pointing device or voice interaction (Figures 1-3 and 4D; col. 3, line 64 to col. 5, line 56), which reads on a method for use with a machine having a graphical user interface and an application program, the method comprising the graphical user interface being controlled at least in part by a control signal that can be invoked in response to the pointing device. Torres does not teach manipulating a graphical item separately from the cursor. Porter discloses a voice recognition system for providing speech recognition systems, which recognize commands for use with a text editor. The recognition system is used with command words for finding files, searching for text strings, manipulating menus so as to display a particular menu of choices (search or find file) and for the selection of the desired displayed command (Col. 7, line 33 to col. 8, line 31; col. 18, line 44 to col. 21, lines; Figures 36-37 and 40-41; col. 21, line 39 to col. 22, line 34). Porter specifically teaches the system is designed so as to improve the ease and reliability with which humans can control computer systems which deal with elements contained in data structures, such as words in text files or names in a database (col. 2, lines 15-27). It would have been obvious to one of ordinary skill at the time of the invention to modify the system of Torres to implement changing a set of voiced utterances to be recognized based on an input command as taught by Porter, for the purpose of improving the ease and reliability of the recognizer, as also suggested by Porter.

The examiner agrees that Torres does not disclose manipulating a graphical item separately from the cursor. Porter does not disclose manipulating a graphical item at all. The examiner appears to recognize this, noting that the recognition system is used with "*command words* for finding files, searching for text strings, manipulating menus . . . and for the selection of

the desired displayed command." Indeed, FIGS. 12-14 clearly disclose that the system described by Porter is a *text-based* system, not a graphical system. Even the menus displayed in FIGS 13 and 14 are text-based, not graphical. Therefore, Porter does not disclose, and would not have rendered obvious, manipulating a *graphical* item separately from the cursor.

Regarding claim 42, Torres teaches an operating system with a graphical interface at (col. 4, lines 1-17).

Regarding claim 43, Torres teaches the graphical user interface is shown on a display at col. 3, line 67.

Regarding claim 44, Torres teaches the machine comprises a computer (col. 4, lines 1-7).

Regarding claim 45, similar limitations to claim 41 are discussed above. Additionally Torres teaches there are multiple graphical items and manipulating the other graphical items (Figures 1-3 and 4D; col. 3, line 64 to col. 5, line 56), as various menu items, windows or graphical representations to which the user has access and control.

Regarding claims 46-51, Torres teaches manipulating other graphical items includes altering size and location of a window (Figures 1-3 and 4D; col. 3, line 64 to col. 5, line 56).

Claims 42-51 are patentable for at least the same reasons as claim 41.

All of the dependent claims are patentable for at least similar reasons as those for the claims on which they depend are patentable.

Canceled claims, if any, have been canceled without prejudice or disclaimer.

Any circumstance in which the applicant has (a) addressed certain comments of the examiner does not mean that the applicant concedes other comments of the examiner, (b) made arguments for the patentability of some claims does not mean that there are not other good reasons for patentability of those claims and other claims, or (c) amended or canceled a claim does not mean that the applicant concedes any of the examiner's positions with respect to that claim or other claims.

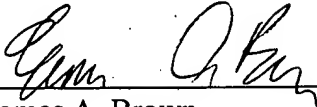
Enclosed is a Enter \$ amount check for excess claim fees and a Enter \$ amount check for the Petition for Extension of Time fee. Please apply any other charges or credits to deposit account 06-1050, reference 10591-003008.

Applicant : Thomas R. Firman
Serial No. : 09/783,725
Filed : February 14, 2001
Page : 15 of 15

Attorney's Docket No.: 10591-003008

Respectfully submitted,

Date: 12/26/06



Thomas A. Brown
Reg. No. 54,619

Fish & Richardson P.C.
225 Franklin Street
Boston, MA 02110
Telephone: (617) 542-5070
Facsimile: (617) 542-8906

21519194.doc